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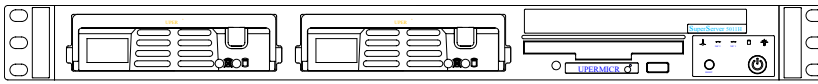
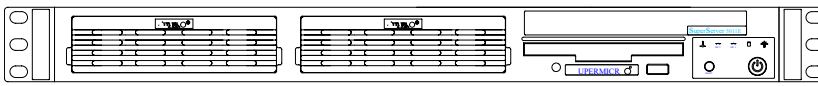


The SC811 Series



The SC811i Series

SC811 CHASSIS

USER'S GUIDE

1.0

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Table of Contents

Chapter I: Safety Information and Technical Specifications 1-4

1-1. Electrical Safety Guidelines 1-4
1-2. General Safety Guidelines 1-5
1-3. ESD Safety Guidelines 1-6
1-4. Operation Safety Guidelines 1-6
1-5. Product Compliance Information 1-8
1-6. Packing List and the SC811 Specifications 1-9

Chapter 2: Chassis Description and Installation Procedures 2-1

2-1. Chassis Description 2-1
A. Contents of the Accessory Kit 2-1
B. Chassis Front View and the Front Control Panel 2-2
C. Chassis Rear View and the Back Panel 2-4

2-2. Chassis Installation 2-5
A. Important Safety Guidelines 2-5
B. Tools Needed 2-5
C-1. Accessing the SCA Drive Tray and Installing a SCSI Drive 2-6
C-2. Accessing the IDE Drive Tray and Installing a HDD 2-7
D. Removing the Top Cover of the Chassis 2-8
E. Accessing the Front Chassis Fans 2-9
F. Accessing the Power Supply 2-10
G. Installing the Motherboard 2-12
H. Installing Chassis Rails 2-14
I. Rack Installation 2-16

Chapter 1-Safety Information and Technical Specifications

1-1 Electrical Safety Guidelines

Warning: *To avoid electrical shock, check the power cords as follows:*

Checking the Power Cords

- Use the exact type of power cords as required.
- Be sure to use power cord(s) that came with safety certifications.
- The power cord(s) must be compliant with the AC voltage requirements in your region.
- The power cord plug cap must have an electrical current rating that is at least 125% of the electrical current rating of this product.
- The power cord plug cap that plugs into the AC receptacle on the power supply must be an IEC 320, sheet C13, type female connector.
- Be sure to disconnect the power supply before accessing the SC811 or its components.
- Plug the Power cord(s) into a socket that is properly grounded before turning on the power.

Warning: *Follow the guidelines below to avoid possible damages to the system or injury to yourself:*

General Electrical Safety Guidelines

- Be aware of the locations of the power switches on the chassis and in the room, so you can disconnect the power supply if an accident occurs.
- Take extra precautionary measures when working with high voltage components. It is not recommended to work alone.
- Before removing or installing main system components, be sue to disconnect the power first. Turn off the system before you disconnect the PS.
- Use only one hand when working with powered-on electrical equipment to avoid possible electrical shock.

- Use rubber mats specifically designed as electrical insulators when working with computer systems.
- The power supply or power cord must include a grounding plug and must be plugged into grounded outlets.
- Motherboard Battery: CAUTION -Make sure not to install the onboard battery upside down to avoid possible explosion. Make sure that the positive side should be facing up on the motherboard. This battery must be replaced only with the same or an equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
- CD-ROM Laser: CAUTION - Do not open the enclosures of power supplies or CD ROM to avoid injury.

1-2 General Safety Guidelines

Warning: *Follow these rules to ensure general safety:*

Keep the area around the SC811 clean and free of clutter.

- To avoid injuries to the back, be sure to use your leg muscles, keep your back straight, and bend your knees, when lifting the system.
- After removing the components or chassis covers from the system, place them on a table for safeguard.
- Avoid wearing loose clothing to preventing it from coming into contact with
- Be sure to remove any jewelry or metal objects before working on the chassis to avoid short circuits should these objects come into contact with power circuits.
- After accessing the interior of the chassis, be sure to close the chassis with chassis covers and secure the chassis to the racks with screws.

1-3 ESD Safety Guidelines

Electric Static Discharge (ESD) can damage electronic components. To prevent damage to your system board, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

- Use a grounded wrist strap designed to prevent static discharge.
- Keep all components and printed circuit boards (PCBs) in their antistatic bags until ready for use.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Do not let components or PCBs come into contact with your clothing, which may retain a charge even if you are wearing a wrist strap.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Handle a board by its edges only; do not touch its components, peripheral chips, memory modules or contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard and peripherals back into their antistatic bags when not in use.
- For grounding purposes, make sure your computer chassis provides excel lent conductivity between the power supply, the case, the mounting fasteners and the motherboard.

1-4 Operation Safety Guidelines

Warning: *For proper cooling, make sure to install all chassis covers before turning on the system. If this rule is not strictly followed, warranty may become void. Do not open the casing of a power supply. Power supplies can only be accessed and serviced by a qualified technician of the manufacturer.*

To avoid personal injury and property damage, please carefully follow all the safety steps listed below:

Before accessing the chassis:

1. Turn off all peripheral devices connected to the SC811.
2. Press the power button to power off the system.
3. Unplug all power cords from the system or the wall outlets.
4. Disconnect all the cables and label the cables for easy identification.
5. Use a grounded wrist strap designed to prevent static discharge when handling components.

Removing the chassis covers:

After completing the above steps, you can remove the covers and install components/peripheral devices into the chassis as described in Chapter 2.

1. Unlock and remove the screws and fasteners to remove the cover or components.
2. Save all the screws and fasteners for later use. (If necessary, label these screws or fasteners for easy identification.)
3. Follow the instruction given in Chapter 3 to remove the chassis covers.

Reinstalling the chassis covers:

To maintain proper system cooling and airflow, do not operate the system without installing all chassis covers back to the chassis. To reinstall the chassis covers, please follow the steps listed below:

1. Make sure that all components and devices are securely fastened on the chassis and there are no loose parts/screws inside the chassis.
2. Make sure that all cables are properly connected to the connectors and ports.
3. Use the original screws or fasteners to install the covers to the chassis.
4. Be sure to lock to the chassis or the system to prevent unauthorized access.
5. For proper cooling, enclose the chassis with covers before operating the system.

Before installing the chassis into a rack:

1. Make sure that the rack is securely anchored onto a unmovable surface or structure before installing the chassis into the rack.
2. Unplug the power cord(s) of the rack before installing the chassis into the rack.
3. Make sure that the system is adequately supported. Make sure that all the components are securely fastened to the chassis toprevent components falling off from the chassis.
4. Be sure to install an AC Power Disconnect for the entire rack assembly and this Power Disconnect must be clearly marked.
5. The rack assembly shall be properly grounded to avoid electric shock.
6. The rack assembly must provide sufficient airflow to the chassis for proper cooling.

1-5 Product Compliance Information

If integrated with a motherboard validated and recommended by Supermicro, and configured based upon the instructions outlined in this manual, the SC811 Chassis is compliant with the following safety standards/requirements:

Product Safety

*Canada/USA--UL60 950-CSA60 950
*European Union--EN 60 950
*International--IEC 60 950

Electromagnetic Compatibility (EMC)-Emissions

*European Union--EN55022: 1994
*International--CISPR 22
*USA--Title 47 CFR, Part 15

Electromagnetic Compatibility-Immunity

*European Union--EN55024: 1998
*International--CISPR 24

Power Line Harmonics/Voltage Flicker

*European Union--EN61000-3-2/EN61000-3-3
*International--IEC61000-3-2

1-6 Packing List and the SC811 Specifications

A. The SC811 chassis contains the following:

The SC 811i (811-IDE) Series:

SC811i (250W/260W/350W/420W)			Notes
Component	**Qty**	**Part Number**	
IDE Drive Tray	2	CSE-PT16(B)-OEM	
Fan	2	FAN-0038	*250W, 350W only
Fan	2	FAN-0066	*260W only
Fan	2	FAN-0071	*420W only
250W Power Supply	1	PWS-021	
260W Power Supply	1	PWS-0055	
350W Power Supply	1	PWS-042-24	
420W Power Supply	1	PWS-0053	
Rackmount Hardware	1set	CSE-PT8	

The SC 811T (811-Serial ATA) Series:

SC811T (250W/260W/350W/420W)			Notes
Component	**Qty**	**Part Number**	
SCA Drive Tray	2	CSE-PT10(B)-OEM	
Fan	2	FAN-0038	*250W, 350W only
Fan	2	FAN-0066	*260W only
Fan	2	FAN-0071	*420W only
250W Power Supply	1	PWS-021	
260W Power Supply	1	PWS-0055	
350W Power Supply	1	PWS-042-24	
420W Power Supply	1	PWS-0053	
2-port SATA Backpanel	1	CSE-SATA-810	
SATA Cable	2	CBL-0044	*250W, 350W only
SATA Cable	2	CBL-0061	*260W, 420W only
SATA LED Cable	1	CBL-0056	
Rackmount Hardware	1set	CSE-PT8	

The SC 811S (811-SCSI) Series:

SC811S (260W/350W/420W)			Notes
Component	**Qty**	**Part Number**	
SCA Drive Tray	2	CSE-PT10(B)-OEM	
Fan	2	FAN-0038	*350W only
Fan	2	FAN-0066	*260W only
Fan	2	FAN-0071	*420W only
260W Power Supply	1	PWS-0055	
350W Power Supply	1	PWS-042-24	
420W Power Supply	1	PWS-0053	
2-port SCSI Backpanel	1	CSE-SCA-004	
SCSI Cable	1	CBL-0033-U320	*260W only
SCSI Cable	1	CBL-0063	*350W, 420W only
Rackmount Hardware	1set	CSE-PT8	

B. The Accessory Kit contains the following:

Component	Quantity
AC Power Cord	1
Screws	1 set
Rackmount Kit	1 (CSE-PT8)

C. The Power Supply Specifications of the SC811

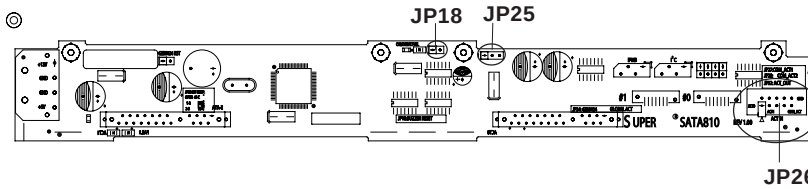
Power supply spec	250W	260W	350W	420W
Mfr. Model#	EFA-250	SP262-1S	FSP350-601U	SP423-1S
Mfr. Part#	PWS-021	PWS-0055	PWS-042-24	PWS-0053
Rated AC input voltage	100-240V AC	100-240V AC	100-240V AC	100-240V AC
Rated input frequency	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Rated input current	4A MAX	5A MAX	6A MAX	7A MAX
Rated output power	250W	260W	350W	420W
Maximum rated BTU	1320 BTUs/Hr	1370 BTUs/Hr	1850 BTUs/Hr	2220 BTUs/Hr
Nominal DC output				
+3.3V	20A	15A	20A	20A
+5V	25A	25A	25A	30A
+12V	13A	18A	25A	32A
-12V	0.8A	1A	0.8A	1A
+5Vsb	2A	2A	2A	2A

D. The Serial ATA Back Panel (*SC811T Only)

D-1 Jumper Settings and Pin Definitions

Jumper	Default Setting	Notes
JP18	Open	Buzzer Reset
JP25	1-2	Overheat Temperature 50^{O}C
JP26	Open	Common Activity In and Act#1~Act#2 In

D-2 Jumper Setting Locations

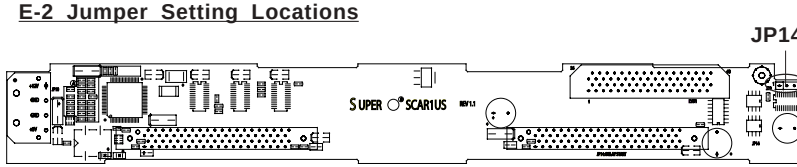


E. The SCSI Back Panel (*SC811S Only)

E-1 Jumper Settings and Pin Definitions

Jumper	Default Setting	Note
JP14	Open	Delay Start

E-2 Jumper Setting Locations



Notes

Chapter 2: Chassis Description and Installation Instructions

2-1 Chassis Description

A. Contents of the Accessory Kit:

The following items are included in the Accessory Kit:

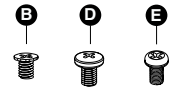
M/B

A. Pan head w/ lock
6-32 x 4.5 mm [0.177]

HDD

B. Flat head 6-32 x 5 mm [0.197]

DRIVE

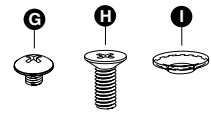


B. Flat head 6-32 x 5 mm [0.197]

D. Pan head 6-32 x 5 mm [0.197]

E. Round head M3 x 5 mm [0.197]

RAIL



G. Round head M4 x 4 mm [0.157]

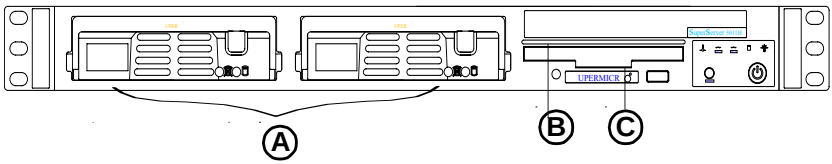
H. Flat head M5 x 12 mm [0.472]

I. Washer for M5

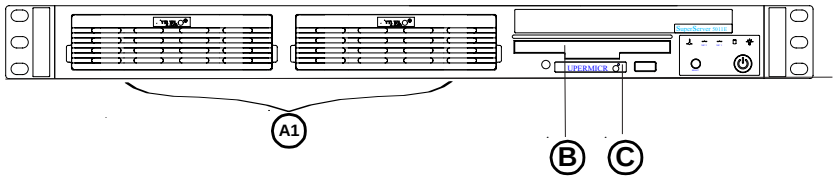
C. Chassis Front View and the Front Control Panel

Chassis Front View

The 811S/SC811T Series



The 811i Series



Front Panel I/O Device Definitions

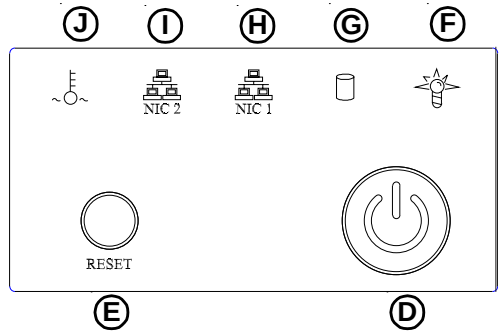
A. 1" Hot-swap SCA Drive Bay(2) (*SC811S/T)

A1. IDE Drive Bay(2) (*SC811i)

B. Slim CDROM(1) (*Optional)

C. Floppy (*Optional)

Front Panel LED Indicators



LED Button Definitions

D. Power Button
E. Reset Button
F. Power Indicator
G. HDD Activity
H. LAN1
I. LAN2
J. Overheat

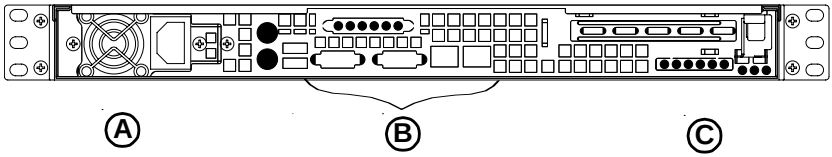
(*Note: After the Alarm goes off, please press the Reset Button to reactivate the function.)

Front Control Panel LED Button Descriptions

LED Button	Color	Condition	Description
Power	Green	On	System On
		Off	System Off
HDD	Amber	Blink	HDD Activity
		Off	No Activity
LAN1 & LAN2	Green	On	Linked
		Blink	LAN Activity
		Off	Disconnected
Overheat	Red	On	System Overheat
		Off	System Normal

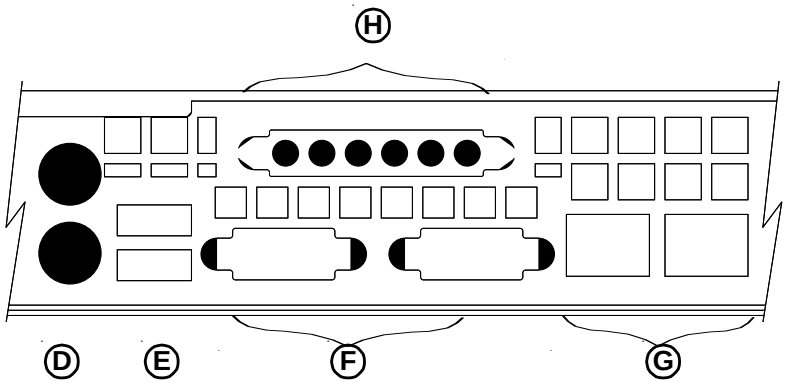
D. Chassis Rear View and the Back Panel

SC811 Chassis Rear View



Back Panel Devices

A. Power Supply Module
B. Back Panel I/O Ports
C. Full size PCI Expansion Slot (1)



*I/O Back Panel

Back Panel I/O Port Definitions

D. Keyboard & Mouse
E. USB Ports
F. COM/Video Ports
G. LAN1 & LAN2
H. Parallel Port

(*Note: The actual I/O Configuration of your system might be different from the one shown above.)

2-2 Chassis Installation

A. Important Safety Guidelines

This product shall only be accessed, assembled and serviced by technically qualified personnel or technicians.

To avoid personal injury and property damage, please read all the information provided in Chapter 1, and carefully follow all the Safety Guidelines listed before accessing or servicing the SC811 or its components. For your convenience, some Safety Steps are also listed below:

Safety Steps

Before accessing the chassis:

1. Turn off all peripheral devices and turn off the power supply connected to the SC811.
2. Unplug all power cords from the system or the wall outlets.
3. Disconnect all the cables and label the cables for easy identification.
4. Use a grounded wrist strap designed to prevent static discharge when handling components.

Removing the chassis covers:

After completing the above steps, you can remove the chassis covers and install components and devices into the chassis as described in this chapter.

1. Unlock and remove the screws and fasteners to remove the cover or components.
2. Save all the screws and fasteners for later use. (If necessary, label these screws or fasteners for easy identification.)
3. Follow the instructions given in this chapter to remove the chassis covers.

B. Tools needed

1. Fillips Screw Driver
2. Antistatic Strap

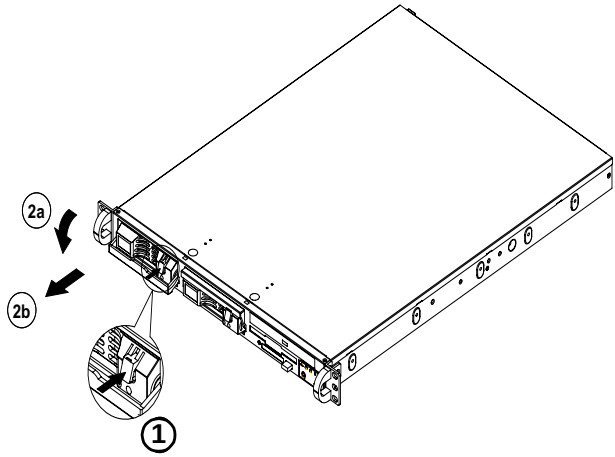
C-1. Accessing the SCA Drive Tray and Installing a SCSI

To install a SCA drive into the chassis, you need to first remove the SCA drive tray from the chassis.

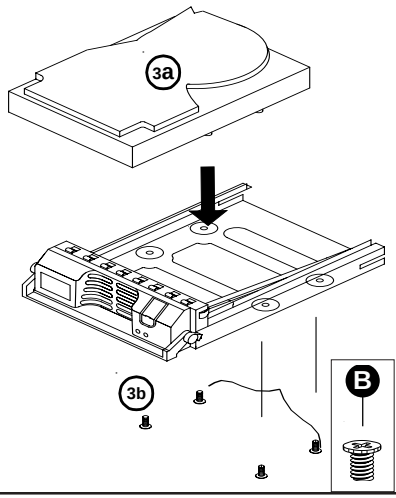
Procedures

1. Press the release tab located on the side of the drive tray door to unlock the drive tray.

2. Once the drive tray is loosened, pull the drive tray out from the chassis.



3. Mount a hard drive in the drive tray, and secure it with 4 screws as shown below:



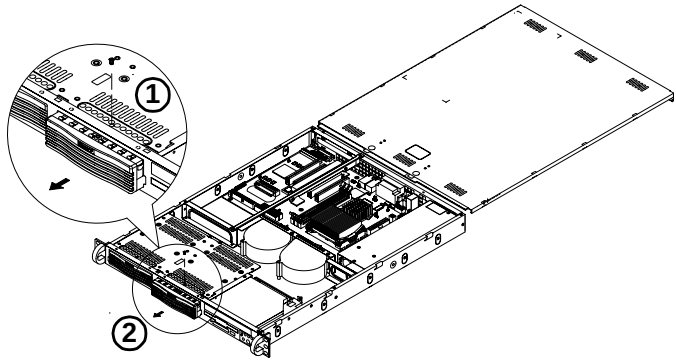
C-2. Accessing the IDE Drive Tray and Installing an IDE HDD

To install an IDE HDD into the chassis, you need to first remove the IDE HDD drive tray from the chassis.

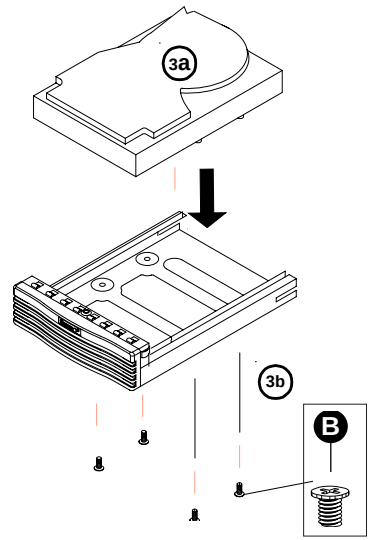
Procedures

1. Press the release tab located on the top of the drive tray to unlock the drive tray as shown below.

2. Once the drive tray is loosened, pull the drive tray out from the chassis.



3. Mount a hard drive in the drive tray, and secure it with 4 screws as shown below:

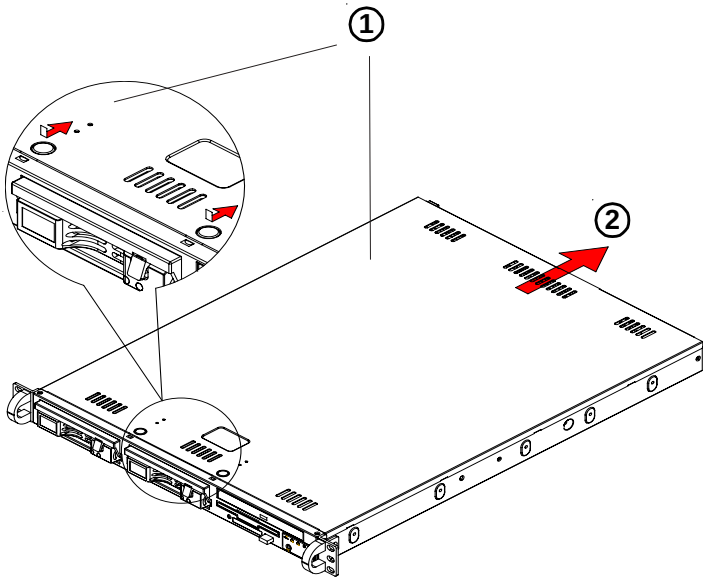


D. Removing the Top Cover of the SC811 Chassis

Before installing any components, replacing chassis fans or accessing the motherboard, you will first need to remove the top cover.

Procedures

1. Press the release tabs to release the cover from its locking position.



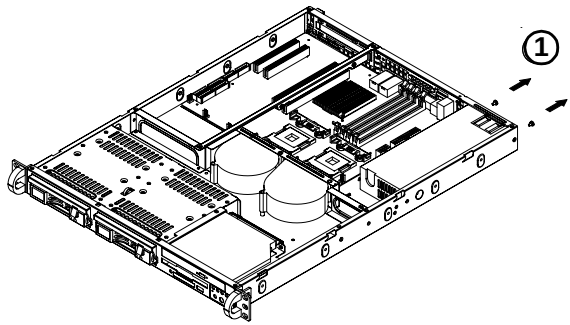
2. Once the top cover is released from its locking position, push the cover toward the rear side and slide it out from the chassis.

E. Accessing the Power Supply

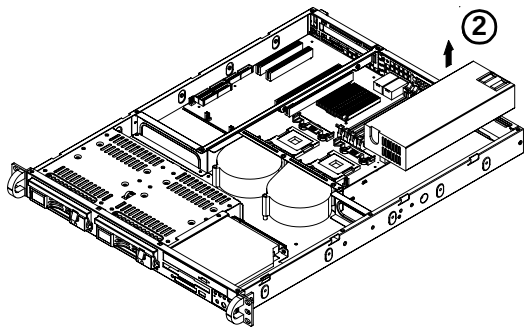
(*Caution: Unplug the Power Cord before removing the Power Supply!!)

Procedures

1. Remove the two screws from the power supply panel.



2 . Once the power supply module is released from its locking position, remove it from the chassis as shown below:



Warning: *Do not open the casing of a power supply. Power supplies can only be accessed and serviced by a qualified technician from the manufacturer.*

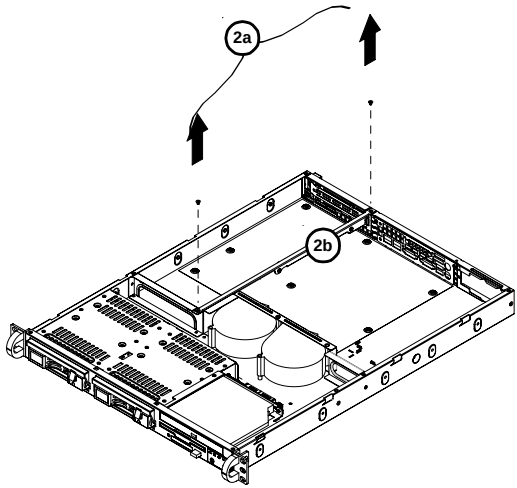
F. Installing the Motherboard

Be sue to disconnect the power supply before accessing or installing the motherboard into the chassis. However, you will need to, first, identify the CPU locations, and then, install the correct type of standoffs under the CPUs before installing the motherboard into the chassis. (Refer to Chapter 1 for Safety Guidelines.)

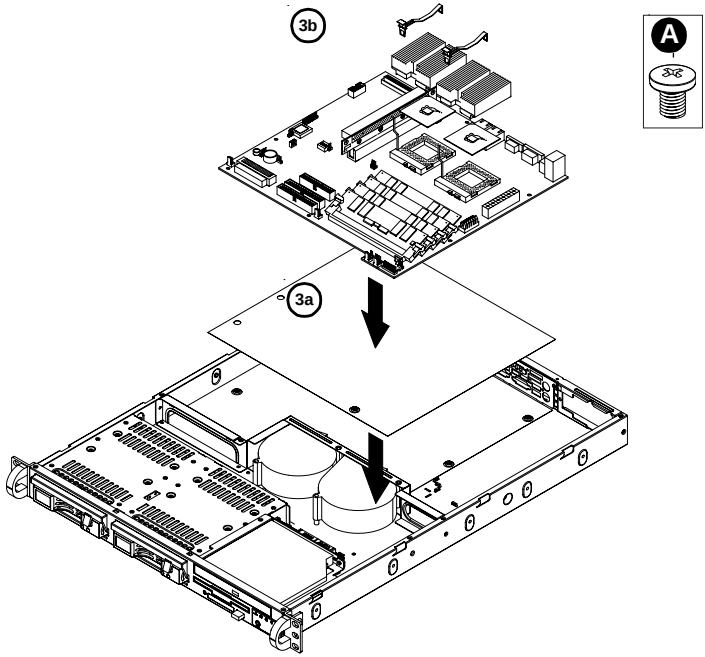
Procedures

1. Lay the chassis on a flat surface.

2. Remove two screws from the riser card bracket, and, then, remove it from the chassis for easy motherboard installation.



3. Lay the Mylar sheet that came with the chassis package between the motherboard and the chassis for insulation. Secure the motherboard and the Mylar sheet to the chassis with Type A screws as shown above. (*Please refer to Page 2-1 MB kit for the Type A screw.)



4. Secure the CPU heatsink mechanism to the motherboard.

(**__Note__: the CPU and the motherboard shown above are for reference only!! Both items are not included in the SC811 shipping package.)

Warning: *For proper cooling, please make sure that all the chassis covers are installed before you operate the system. Out of warranty damage can occur if this rule is not strictly followed.*

G. Installing Chassis Rail (-Inner Rails)

Please make sure that the chassis covers and chassis rails are installed on the chassis before you install the chassis into the rack.

To avoid personal injury and property damage, please carefully follow all the safety steps listed below:

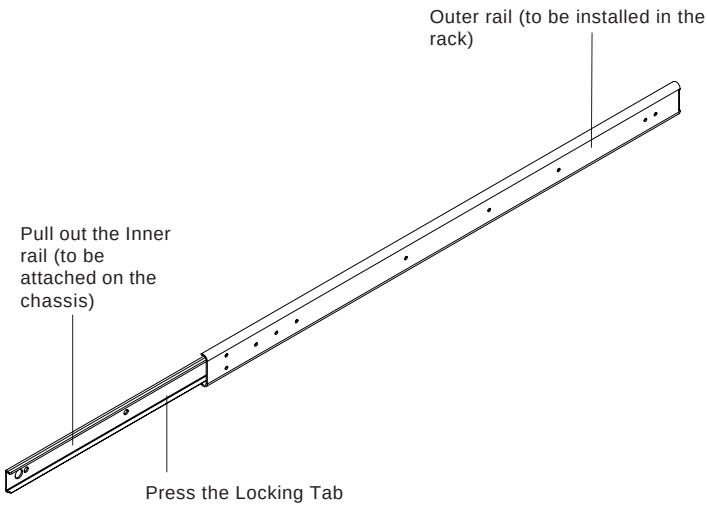
Before installing the Chassis rails:

1. Enclose the chassis with chassis covers.
2. Unplug the AC power cord(s).
3. Remove all external devices and connectors.

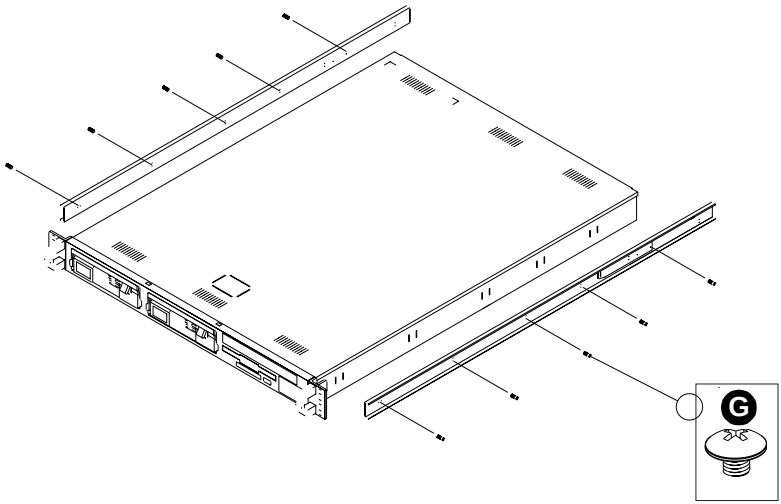
Procedures to Install Chassis Rails

1. Included in the shipping package are a pair of rail assemblies. In each rail assembly, locate the inner rail and the outer rail.

2. Press the locking tab to release the inner rail from its locking position and pull out the inner rail from the rail assembly. (*The inner rails are to be attached to the chassis and the outer rails are to be installed in the rack.)



3. Locate the five holes on each side of the chassis and locate the five corresponding holes on each of the inner rail.



4. Attach an inner rail to each side of the chassis and secure the inner rail to the chassis by inserting five Type G screws through the holes on the chassis and the inner rail. (Refer to Page 2-1 for the Type G screw.)

5. Repeat the above steps to install other rail on the chassis.

H-1 Rack Installation for the Traditional IU Design

After you have installed the inner rails on the chassis, you are ready to install the outer rails of rail assemblies to the rack.

(* The rails are designed to fit in the racks with the depth of 28" to 33".)

Procedures

1. In the package, locate a pair of front (-short) and rear (-long) brackets. Please note that the brackets are marked with Up/Front Arrows (-front) and Up/Rear arrows (-rear).

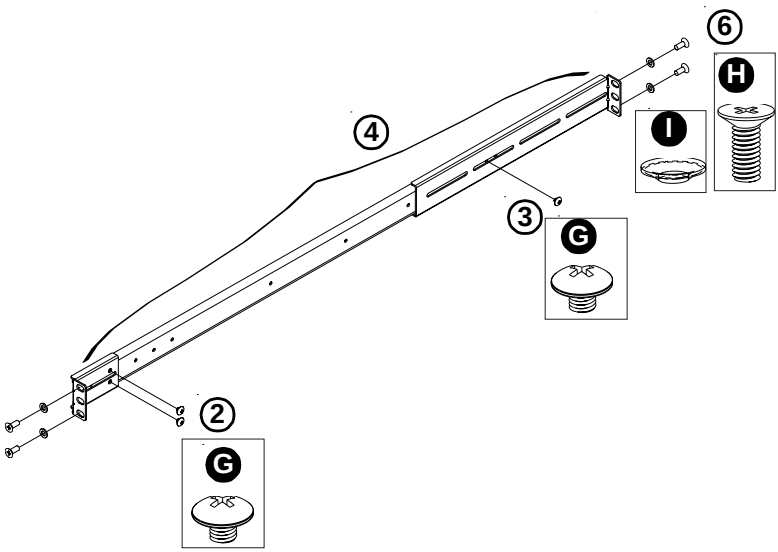
2. Secure the front (-short) bracket (marked with the Up/Front arrows) to the outer rail with two Type G screws.

3. Attach the rear (-long) bracket to the other end of the outer rail and secure the rear (long) bracket to the outer rail with a Type G screw as shown below.

4. Measure the depth of your rack and adjust the length of the rails accordingly.

5. Repeat the same steps install the other outer rail on the chassis.

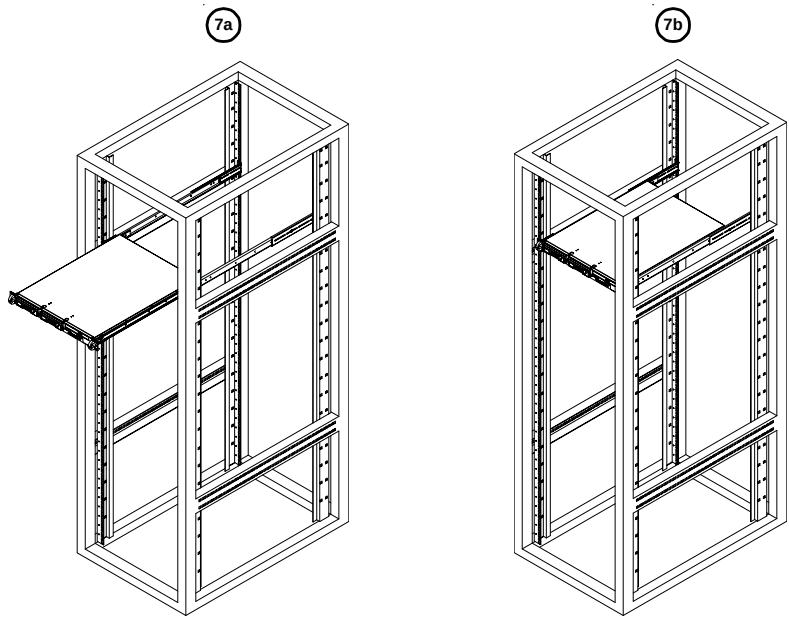
6. Secure both outer rail assemblies to the rack with Type H screws and Type I washers.



7. Slide the SC811 chassis into the rack as shown below:

(The SC811 may not slide into the rack smoothly or easily when installed the first time. However, some adjustment to the slide assemblies might be needed for easy installation.)

8. You will need to release the safety taps on both sides of the chassis in order to completely remove the chassis out of the rack.



H-2 Rack Installation for the Open-Rack Design

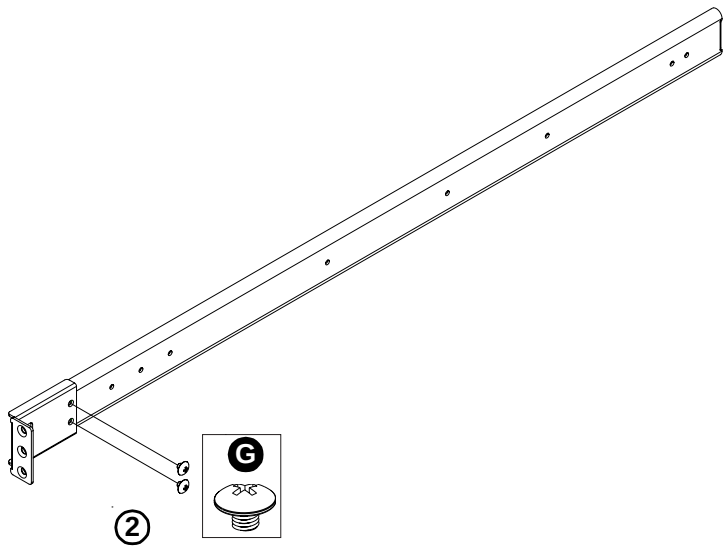
After you have installed the inner rails on the chassis, you are ready to install the outer rails of rail assemblies to the rack.

(* The rails are designed to fit in the racks with the depth of 28" to 33".)

Procedures

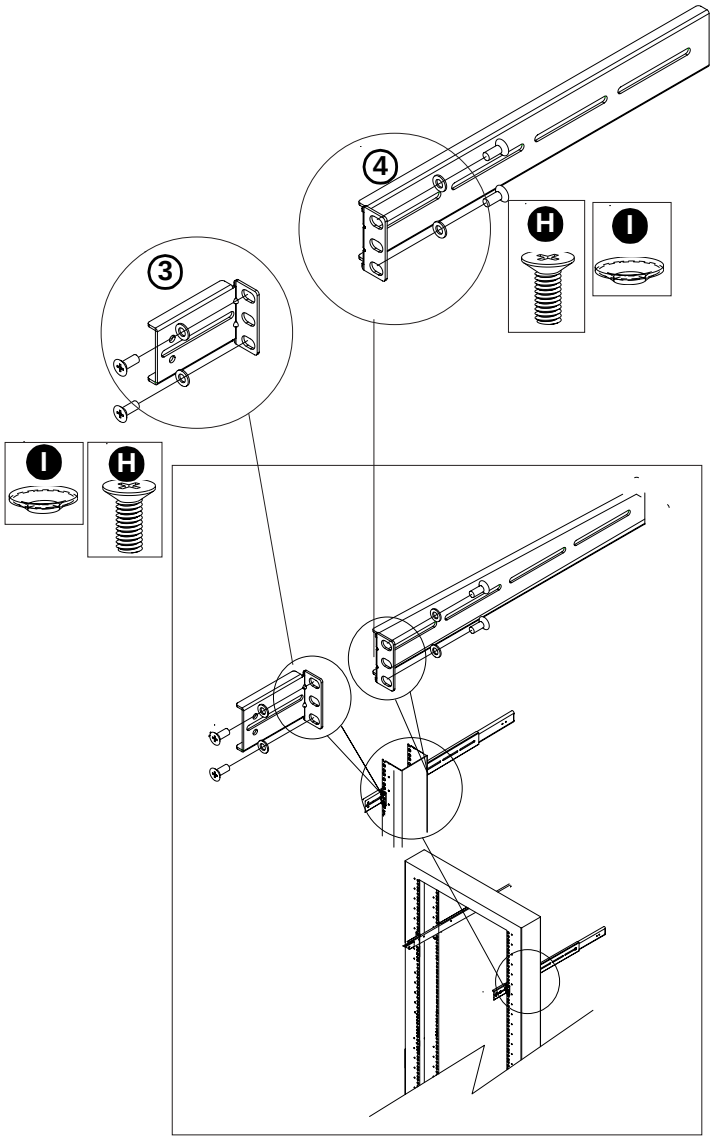
1. In the package, locate a pair of front (-short) and rear (-long) brackets. Please note that the brackets are marked with Up/Front Arrows (-front) and Up/Rear arrows (-rear).

2. Secure the front (-short) bracket (marked with the Up/Front arrows) to the outer rail with two Type G screws as shown below:



3. Attach the front (-short) bracket to the front end of the rack, and secure it to the rack with two Type H screws and Type I washers as shown below.

4. Attach the rear (-long) bracket to the rear end of the rack, and secure it to the rack with two Type H screws and Type I washers as shown below. Repeat the same steps to install the other outer rail to the other side of rack.



5. Measure the depth of your rack and adjust the length of the rails accordingly. Then, secure the rails to the chassis with Type G screws.

6. Slide the inner rails which are attached to the chassis to into the outer rails on the rack.